Claims

What is claimed:

1. A method, comprising:

executing a service selection method on an off load processor of a computing system to select an available network service for handling traffic sent to/from a handheld device, said executing being performed while a main CPU of said computing system is in a low power state.

2. The method of claim 1 wherein said selection method further comprises discovering that said available network service is available within said computing system's present environment prior to said handling.

3. The method of claim 2 wherein said selecting further comprises selecting said available service because it has a lowest cost metric amongst a plurality of available network services.

4. The method of claim 2 wherein said selecting further comprises selecting said network service according to a pre-determined policy.

5. The method of claim 2 wherein said selection method further comprises maintaining a table within a memory coupled to said off load processor, said memory having an entry that correlates said available network service with an identity of said handheld device, said identity to communicate with said handheld device.

6. The method of claim 5 wherein said selection method further comprises updating said table as a consequence of said computing system entering a new environment of available network services.

7. A method, comprising:

with a computing system that comprises a PAN interface and a non PAN interface, supporting traffic flows between a handheld device and a provider of a network service by:

for a first portion of said traffic destined for said handheld device:

(i) receiving said first portion from said provider at non PAN interface of said computing system;

(ii) sending said first portion from said PAN interface to said handheld device; and,

for a second portion of said traffic destined for said provider:

(i) receiving said second portion from said handheld device at said PAN interface;

(ii) sending said second portion from said non PAN interface to said provider.

8. The method of claim 7 further comprising executing instructions with a processor within said computing system, said processor not a part of said computing system's main CPU, said executing to perform a selection method, said selection method comprising selecting said network service for said handheld device from amongst a plurality of available network services prior to said sending and receiving.

9. The method of claim 8 wherein said selection method further comprises discovering that said available service is available within said computing system's present environment prior to said sending and receiving.

10. The method of claim 8 wherein said selecting further comprises selecting said available service because it has a lowest cost metric amongst said plurality of available network services.

11. The method of claim 10 wherein said selecting further comprises selecting said network service according to a pre-determined policy.

12. The method of claim 10 wherein said selection method further comprises maintaining a table within a memory coupled to said processor, said memory having an entry that correlates said available network service with an identity of said handheld device, said identity to communicate with said handheld device from said PAN interface.

13. The method of claim 12 wherein said selection method further comprises updating said table as a consequence of said computing system entering a new environment of available network services.

14. The method of claim 8 wherein said executing further comprising executing instructions with said processor that causes a firewall method to be performed, said firewall method comprising preventing an unwelcome intrusion received at a said non PAN interface from obtaining information from said handheld device.

15. The method of claim 8 wherein said executing further comprising executing instructions with said processor that causes an encryption method to be performed, said encryption method comprising encrypting a first message received from said handheld device via said PAN interface, said first message to be sent from said non PAN interface to said service provider.

16. The method of claim 8 wherein said non-PAN interface further comprises a wireless interface.

17. The method of claim 16 wherein said wireless interface further comprises a cellular network interface.

18. The method of claim 16 wherein said wireless interface further comprises a wireless LAN interface.

19. The method of claim 16 wherein said wireless LAN interface further comprises a BLUETOOTH interface.

20. The method of claim 16 wherein said wireless LAN interface further comprises an 802.11 interface.

21. The method of claim 7 wherein said non-PAN interface further comprises a wireless interface.

22. The method of claim 21 wherein said wireless interface further comprises a cellular network interface.

23. The method of claim 21 wherein said wireless interface further comprises a wireless LAN interface.

24. The method of claim 21 wherein said wireless LAN interface further comprises a BLUETOOTH interface.

25. The method of claim 21 wherein said wireless LAN interface further comprises an 802.11 interface.

26. A computing system, comprising:

a main CPU and an off load processor, said main CPU coupled to an EDO RAM system memory through a memory control hub, said off load processor communicatively coupled to one or more I/O interfaces and a memory, said I/O interfaces comprising a PAN interface and at least one non-PAN interface, said PAN interface able to communicate with a handheld device, said off load processor coupled to a memory, said memory to store instructions that can be executed by said off load processor, said instructions to cause said off load processor to perform a method when executed, said method selected from the group consisting of:

1) a firewall protection method that can prevent an unwelcome intrusion received at a said non PAN interface from obtaining information from said handheld device;

2) an encryption method that encrypts a first message received from said handheld device via said PAN interface, said first message to be sent from said non PAN interface; and,

3) a service selection method that identifies an available network service for handling traffic sent to/from said handheld device, said traffic to flow:

a) between a provider of said available network service and non PAN interface; and,

b) between said PAN interface and said handheld device.

27. The computing system of claim 26 wherein said at least one non-PAN interface further comprises a wireless interface.

28. The computing system of claim 27 wherein said wireless interface further comprises a cellular network interface.

29. The computing system of claim 27 wherein said wireless interface further comprises a wireless LAN interface.

30. The computing system of claim 29 wherein said wireless LAN interface further comprises a BLUETOOTH interface.

31. The computing system of claim 30 wherein said wireless LAN interface further comprises an 802.11 interface.

32. The computing system of claim 26 wherein said service selection method further comprises discovering that said available network service is available within said computing system's present environment.

33. The computing system of claim 32 wherein said service selection method further comprises selecting said available network service because it has a lowest cost metric amongst other presently available network services.

34. The computing system of claim 32 wherein said service selection method further comprises selecting said available network service according to a pre-determined policy.

35. The computing system of claim 32 wherein said service selection method further comprises maintaining a table within said memory having an entry that correlates said available network service with an identity of said handheld device used to communicate with said handheld device from said PAN interface.

36. The computing system of claim 32 wherein said service selection method further comprises updating said table as a consequence of said computing system entering a new environment of available network services.